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NOTICE OF ALLOWANCE AND FEE(S) DUE

38779 7590 05/09/2008

SENNIGER POWERS LLP (MSFT)
ONE METROPOLITAN SQUARE, 16TH FLOOR
ST. LOUIS, MO 63102

EXAMINER

NEWMAN, MICHAEL A

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 05/09/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,631

11/26/2003

David D. Bohn

003797.00687

7330

TITLE OF INVENTION: FINGERPRINT SCANNER WITH TRANSLATING PLATEN

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	08/11/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

38779 7590 05/09/2008

**SENNIGER POWERS LLP (MSFT)
ONE METROPOLITAN SQUARE, 16TH FLOOR
ST. LOUIS, MO 63102**

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,631 11/26/2003 David D. Bohn 003797.00687 7330

TITLE OF INVENTION: FINGERPRINT SCANNER WITH TRANSLATING PLATEN

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nonprovisional NO \$1440 \$300 \$0 \$1740 08/11/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
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NEWMAN, MICHAEL A 2624 382-126000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/722,631	11/26/2003	David D. Bohn	003797.00687	7330
38779	7590	05/09/2008	EXAMINER	
SENNIGER POWERS LLP (MSFT) ONE METROPOLITAN SQUARE, 16TH FLOOR ST. LOUIS, MO 63102			NEWMAN, MICHAEL A	
			ART UNIT	PAPER NUMBER
			2624	
DATE MAILED: 05/09/2008				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 745 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 745 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/722,631

Examiner

MICHAEL A. NEWMAN

Applicant(s)

BOHN ET AL.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Supplemental Amendment submitted on April 28th 2008.
2. ☒ The allowed claim(s) is/are 1,4,6-18,21-27 and 29-31 (now renumbered 1-25 for issue).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 14th, 2008 has been entered. The supplemental amendment to the claims filed on April 28th, 2008 has also been entered.

Response to Amendment

2. The supplemental amendment filed on April 28th, 2008 has been entered.
3. In view of the amendment to the claims filed on April 28th, 2008, the amendment to claims 1, 9, 14, 15, 21, 27, and 30, the addition of claim 31, and the cancellation of claims 2, 3, 5, 19, 20 and 28 are acknowledged.
4. In view of the cancellation of claims 2, 3, 5, 19, 20 and 28, the double patenting rejection of the claims, the rejection under 35 U.S.C. 102(b) of claim 28, and the rejection under 35 U.S.C. 103 of claims 2, 3, 5, 19 and 20 have been withdrawn.
5. In view of the amendment of claims 1, 9, 14, 15, 21, 27 and 30, the double patenting rejection of the claims, the rejection under 35 U.S.C. 102(b) of claims 21 and 27, and the rejection under 35 U.S.C. 103 of claims 1, 9, 14, 15 and 30 have been withdrawn.

Record of Examiner-Initiated Interview

6. Responsive to the initial amendment and remarks filed on January 14th, 2008, Applicant's Representative Frank Agovino (Reg No. 27,416), was contacted to propose an Examiner's Amendment to the independent claims believed to set them in condition for allowance by distinguishing over the prior art. Applicant's Representative agreed to the substance of the changes, but submitted the amended claims as part of the supplemental amendment filed on April 28th 2008.

Allowable Subject Matter

7. Claims 1, 4 [renumbered as 2], 6 [renumbered as 3], 7 [renumbered as 4], 8 [renumbered as 5], 9 [renumbered as 6], 10 [renumbered as 7], 11 [renumbered as 8], 12 [renumbered as 9], 13 [renumbered as 10], 14 [renumbered as 11], 15 [renumbered as 13], 16 [renumbered as 14], 17 [renumbered as 15], 18 [renumbered as 16], 21 [renumbered as 17], 22 [renumbered as 18], 23 [renumbered as 19], 24 [renumbered as 20], 25 [renumbered as 21], 26 [renumbered as 22], 27 [renumbered as 23], 29 [renumbered as 24], 30 [renumbered as 25] and 31 [renumbered as 12] are allowed.

8. The following is an examiner's statement of reasons for allowance:

The following discussion applies to all the independent claims 1, 15 [renumbered as 13] and 21 [renumbered as 17].

The invention, as set forth in the claims, consists of a fingerprint scanning device and method. The device essentially consists of a platen that is movable by the force of the fingertip being scanned, as the platen is moved from its initial position to its final position the fingertip surface is viewed by a fixed scan head, which captures scan lines of the fingertip surface and is mounted on the device housing. To ensure the platen returns to its initial position, a spring-like biasing device is attached to the platen. As set forth in the previous Office Actions and evidenced by Tuli (U.S. Patent No. 5,942,761), these features are well known in the art.

An end of scan switch is provided to indicate to the user and the system that the platen has been moved through the complete range. The switch provides tactile feedback to the fingertip upon actuation. This is also known in the art and taught by Barton et al. (U.S. Patent No. 7,162,060). The Barton reference teaches a switch assembly at each end of the platen's range of motion comprising of an opto-interrupter switch and a mechanical stop. When the platen movement is completed, the opto-interrupter switch is activated while the mechanical stops provide tactile feedback to the finger that the platen can no longer move.

In order to assemble the scan lines of the finger surface, the invention includes a non-repeating encoder target pattern on the platen so that the scan head captures, in a single scan line, both a scan line of the fingertip surface and a pattern of the encoder target. The invention then assembles the fingertip surface image from the plurality of captured scan lines by ordering them as a function of

the encoder target pattern included in each. This is also known in the art. Tuli teaches including a *repeating* pattern on the platen that is simultaneously monitored by the scan head. The repeating pattern controls when the scan head will capture a new scan line. In the previous Office Action, Scott et al. (U.S. Patent No. 6,178,255), was used to teach including a *non-repeating* pattern on the platen to allow proper re-ordering and reconstruction of the fingertip surface scan lines.

Finally, as the fingerprint image is being assembled from the captured scan lines, the invention compares the encoder target pattern of each captured scan line with that of scan lines already included in the assembled scan, and discards the captured scan line if its encoder target pattern matches the encoder target pattern of a scan line already used in the assembled scan. The invention results in the fingerprint scanner being independent of the speed at which the user moves the platen. Even if a user temporarily pauses in mid scan, resulting in the same fingertip surface scan line being captured multiple times, the scanner will disregard unnecessary duplicates because their encoder target pattern matches. The closest teaching in the prior art is disclosed by Russo (U.S. Patent no. 7,197,168). Russo teaches a system for assembling a complete fingertip scan from previously captured partial scans. Similar to the present invention, Russo captures multiple line scans of the fingertip regardless of user motion. However, during assembly of the fingertip image, Russo compares the actual fingertip pattern of each scan line to the fingertip pattern or scan lines already part of the

assembled fingertip image. Those detected as having been included are discarded. Russo *does not suggest* the use of a known encoder target pattern for this purpose as in the present invention.

Therefore, it is evident that the prior art made of record, alone or in combination, fails to teach the use of an encoder target pattern on the platen for the purpose of determining whether or not each captured scan line has already been included in an assembled scan, as recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. NEWMAN whose telephone number is (571)270-3016. The examiner can normally be reached on Mon - Thurs from 9:30am to 6:30pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir A. Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.A.N.

/Samir A. Ahmed/
Supervisory Patent Examiner, Art Unit 2624